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Newsletter No. 12
Winter/Spring 1982

National Cartographic
Information Center (NCIC)

Newsletter

U.S. Department of the Interior
Geological Survey
National Mapping Program

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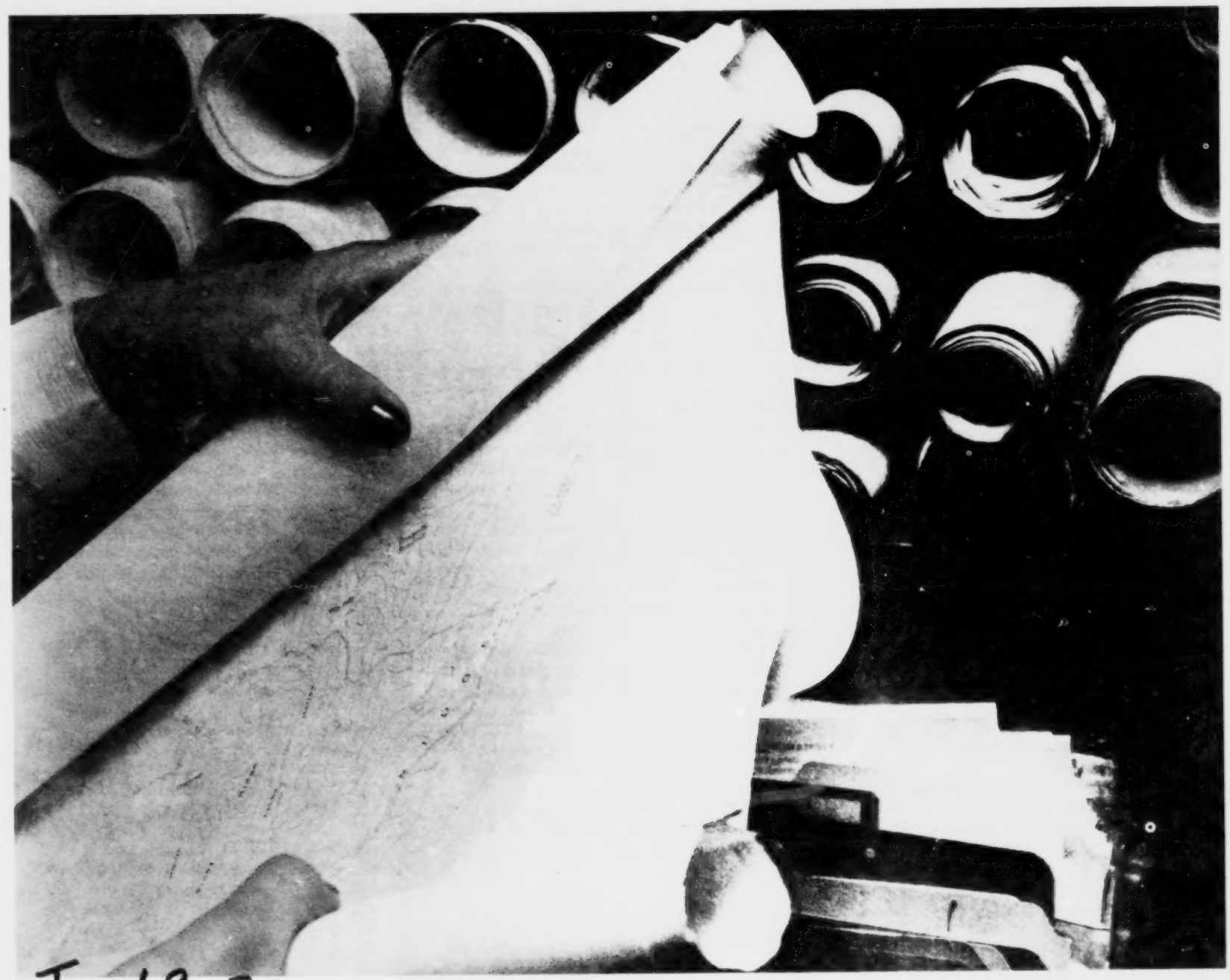

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Editor's Notes

Thank you for your prompt replies to the NCIC Newsletter information cards that some of you may have received with Newsletter No. 11. They have been helpful in updating our mailing list and in giving us an idea of reader interests. The results, thus far, indicate that the majority of our readers are interested in mapping, cartography, and remote sensing.

I have received several inquiries regarding the trim size of the Newsletter. The 9- by 12-inch size is preferred rather than the 8½- by 11-inch size because we can incorporate more news and information onto each page of the Newsletter.

In response to reader suggestions and comments, you will notice that I have indicated which of the new USGS map products reviewed in this Newsletter are USGS Map Reference Library depository items.

Any suggestions or comments regarding the Newsletter are encouraged and should be directed to: Editor, NCIC Newsletter, 507 National Center, Reston, VA 22092.

Special thanks to the many individuals who contributed time and information in the production of this Newsletter. —*Donna Cedar-Southworth*

We are currently reviewing the effectiveness of the USGS Map Reference Library depository program with the objective of improving accessibility to and availability of USGS map products. We would appreciate any comments or suggestions for improvement of that service. Please direct comments to U.S. Geological Survey, Information and Data Services, Chief, Office of Product Distribution Policy, Mail Stop 508 National Center, Reston, VA 22092.

Markham Produces USGS Maps on Microfiche

Dr. Robert P. Markham has a very definite goal—to "improve access" to topographic information, "while reducing cost." And Markham and his staff at the Micrographics Laboratory, James A. Michener Library, University of Northern Colorado, are doing something about it.

Markham and staff are producing microfiche editions of U.S. Geological Survey topographic quadrangle maps. They recently completed the 1:250,000-scale topographic map collection for the United States and the 1:24,000-scale quadrangle maps for Colorado and Wyoming, and are currently working on Utah, Nevada, Arizona, New Mexico, and California.

The idea of putting USGS maps on microfiche started, "very simply, when John Newman, at the Map Library, Colorado State University, asked us to film the Colorado maps onto microfiche in alphabetical order, to be used as backup maps for their map collection." Markham soon realized that it would be more useful to the customer if the maps were arranged by geographical area, so they have done it that way ever since. Markham said that microfiche was used instead of roll microfilm because it is so much easier to update.

The uses of these maps on microfiche are varied. Primarily, they are being used by small public libraries and school libraries who cannot store or cannot afford access to all of the paper maps. Genealogists and historians are using them. The maps are also very convenient to hikers and hunters who can carry them easily and use them with a small handviewer. Libraries often use them as backup copies for maps that have been checked out or are out of stock.

The geographically organized microfiche enable people to view contiguous maps for large-area inspection and research. Each individual fiche contains eight adjacent maps.

For each title area, the microfiche provide the series identification, the State, date of microfilming, reduction ratio, latitude and longitude, quadrangle name, and date of publication. Areas not available on 7.5-minute quadrangles are provided on USGS 1:250,000 scale. There is also a physical features index being planned for each area.

In line with Markham's goal to reduce price, he is trying to keep the prices low "for wider usage." The microfiche are available in three different arrangements. First, the National topographic maps are available by geographic regions of the U.S. Each set costs about $20. Second, the set of all National topographic 1:250,000-scale maps with index assembled in microfiche panels in a protective notebook sells for $300. Third, they are available as 1°×2° 1:250,000-scale quadrangle maps which sell for $25 per area, or $300 for an entire State. The fiche may also be used with a reader/printer for producing paper copies of the maps.

Aside from that activity, Markham has prepared a "National Lands Index to Nationally-Designated Lands on National Topographic Maps." The index was prepared to "increase access to the collection of 1:250,000-scale USGS topographic maps, to facilitate their use, and to be used in conjunction with a microfiche edition of those maps."

The index is based on the most recent edition of maps available, and cites all 1:250,000-scale maps, index to topographic maps for each State, and maps of National Parks, monuments, and other features where possible. In addition, the names of 1:62,500- and 1:24,000-scale topographic quadrangles have been given when possible.

For each entry, the map name, survey date, scale, geographic coordinates, Army Map Service number, and bordering States and provinces are given. For some of the quadrangle maps, the major contour intervals are also given. The index is divided into six sections in which these citations are arranged in six different ways so the user can locate a Federally designated land either alphabetically, by subject matter (such as all Indian Reservations); by State; by coordinates; by map name; and by an Index of Names (available only on microfiche) which lists names of towns and cities and their geographic coordinates. This list was taken from the National Atlas of the United States.

Markham is revising the index to include a National Forest maps index and a State highways index.

The "National Lands Index to Nationally-Designated Lands on National Topographic Maps" is available in book form for $50 and a microfiche edition is available for $30. The maps to be used with the index are also available (see National topographic maps described in first part of this article).

For more information on any of these products write: Micrographics Laboratory, James A. Michener Library, University of Northern Colorado, Greeley, Colorado 80639, (telephone 303-351-2632). —*DCS*

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Map Dealer Program

Maps are turning up in a wide variety of businesses these days—bookstores, real estate agencies, hardware stores, outing and sporting goods stores, even beauty salons and nightclubs. These businessess are joining the 2,600 U.S. map dealers who select, buy, and sell U.S. Geological Survey maps.

Actually, becoming a U.S. Geological Survey maps dealer is not such a new idea. The program was started back in 1953 when interested firms were invited to write in, inquire about, and sign up for the program. Last year the map dealer program was activated full-force when the USGS began actively seeking map dealers. In 1981, the number of map dealers in the U.S. increased 25 percent.

The program was established to make USGS topographic and other maps readily and economically available to the public. The program minimizes Government involvement and encourages private enterprise. Local retail stores and other public facilities who become map dealers can choose and purchase the USGS maps for which they believe they have a market, and resell the maps, over-the-counter, at their place of business.

Topographic, geologic, hydrologic, land use-land cover maps, maps of Antarctica, maps of the Moon, and maps of other planets are among the types of maps that are available for map dealers to sell. Hikers, campers, hunters, students, tourists, home buyers, and bikers are some of the individuals who constitute the market for maps for recreational purposes.

According to Mr. Charles D. Kuhler, Chief of Printing and Distribution Center (P&DC), U.S. Geological Survey, "it is more efficient to sell maps in quantity lots." It is more economical to fill an order for 100 maps from a dealer, package them, and mail them, than it is to fill 100 separate orders. Consequently, when a distribution center receives an order from an individual, the order is filled and a list of the names and addresses of the U.S. map dealers in their State is included. This provides the map dealer business, saving considerable time for the user and the USGS on future orders.

Mr. Kuhler strongly believes in the USGS expanding its map dealer program. Part of recruiting map dealers involves locating potential sales areas, and then following up with direct mail or a personal visit. The Chamber of Commerce is used as a referral service for people and businesses who are interested in obtaining maps. The Chambers of Commerce also provide the USGS with the names and addresses of potential dealers. P&DC is looking into the possibility of recruiting large chain department stores as promising U.S. map dealers.

Air Photographics, Inc., Purcellville, Va.

When a new map dealer is established, a press release is submitted to the local newspapers with a sample map of the area. This lets people know where to go to purchase maps and what the maps look like.

There are currently 2,600 map dealers. They are located in the 50 States, Puerto Rico, Guam, and the Virgin Islands. Each State varies in its number of map dealers. California has the most with 377, and Washington, D.C., has the fewest with two. Dealer recruiting has been carefully planned by phases with approximately six States being surveyed in each phase. Each phase, which lasts about three months, is an all-out effort to recruit dealers within the six States, and this approach seems to be working. Under this plan, Ohio increased from 24 map dealers to 87, and Indiana from seven to 60.

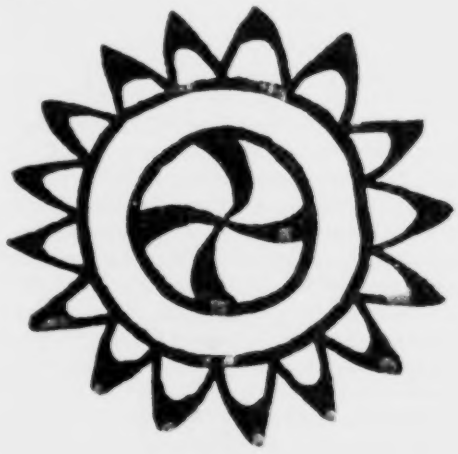
The dealer enters into an agreement with the U.S. Geological Survey. The USGS provides maps to the dealer at a 50 percent discount from the USGS retail price. The dealer must make an initial purchase of $200 after discount price for topographic maps or a combination of topographic and other maps. Subsequent orders may be for any amount. The dealers can establish their own selling prices for the map products.

The USGS prints the dealer's name and address on the Index to Topographic Maps for the State in which their business is located. The dealer must stock some or all of those maps listed on the Index for his State. Dealers are automatically supplied with updated indexes, and the pamphlet, "New Publications of the U.S. Geological Survey." In addition, dealer orders will always receive priority. Promotional items such as window decals and counter display signs are supplied at no charge.

The program is regionally managed through the two distribution centers who fill the map orders. The Eastern Distribution Branch fills orders for maps of areas east of the Mississippi River, including Minnesota, Puerto Rico, and the Virgin Islands. The Western Distribution Branch fills orders for areas west of the Mississippi River, including Alaska, Hawaii, Louisiana, Guam, and American Samoa. Both of the distribution centers publish a "Dealer Newsletter" to "further communication with the dealers" and keep them informed of new developments and products of interest.

For more information concerning the program or about entering into an agreement, contact: U.S. Geological Survey, National Mapping Division Dealer Program, 580 National Center, Reston, VA 22092. —*DCS*

Map of Solar Energy



ENMAP Corporation has produced a 1:5,000,000-scale map of solar energy for the United States and Canada. The map illustrates available seasonal and yearly solar radiation that can be used for heating homes and water supplies for 222 U.S. cities and 21 Canadian cities. Cities not designated on the map can determine solar radiation values from nearby areas with similar elevations and, where applicable, coastal settings.

For each city the average temperatures for each season are given, along with heating degree-day values (the amount of heat or fuel required to heat buildings), and the yearly average of daily solar radiation for each season. All data are specified in English units, with a conversion table for other units of measurement.

A heating degree-day is the number of degrees that the daily average temperature is below 65°F. For any day with a temperature below 65°F, the temperature is subtracted from 65°F and the difference becomes the heating degree-day for that particular day. For example, if on October 27, the temperature is 50°F, the heating degree-day would equal 15.

Solar radiation figures are underlined on the map. They are equal to the mean daily amounts of radiation that would be received on a south facing surface with the optimum angle for solar collection. Data is given in BTUs per square foot per day. These solar radiation figures can also be used throughout the year for heating water systems.

There are bright red lines running throughout the map which illustrate the annual distribution of radiation. Yearly radiation totals are underlined on the map. Geographic areas have been color coded to indicate the amount of solar radiation available for that area. Thus, at a quick glance, it is possible to spot the area with the greatest and least amounts of solar radiation.

An in-depth explanation is provided on the colorful 30- by 47-inch map. In addition, 1,250 cities and their elevations are shown.

The map is an interesting vehicle for demonstrating the seasonal and geographical availability of solar radiation as an energy-efficient means of heating. The map should be of interest to architects, engineers, builders, teachers, and anyone considering building a solar home.

The map of solar energy is available, rolled or folded (please specify when ordering), for $9.50 plus $1.50 postage and handling from: Solar Energy Map, ENMAP Corporation, P.O. Box 4430, Boulder, CO 80306. —*DCS*

Public Inquiries Office—A Focal Point

Every Federal Government agency has an information center which is often the first contact an individual has with that agency. It is the place that people usually end up phoning because they're not quite sure whom else to call. Information offices go by different names. Some call themselves Public Information Offices, or Publications and Information Offices. The information office for the U.S. Geological Survey is the Public Inquiries Office, known by its acronym as the PIO.

Specifically, the Public Inquiries Office serves as a focal point for obtaining information on all Survey publications and activities.

If you hesitate to call the PIO because you're afraid you will be referred numerous times, and end up frustrated, confused, and still empty-handed—don't be. The PIO has a policy never to refer an inquiry immediately unless it is a standard, routine type of request and they have a well established contact for you. If the inquiry is about information that has been published, the assistant will furnish the appropriate map or publication. If the publication is not contained in Federal lists, they will check at the State level for you. If an appropriate publication cannot be located, the public information specialist will contact an appropriate office within the Survey and speak with the project leader to get information on ongoing projects and publications. If your inquiry is complex and no information is readily at hand, the specialist will write down what you need,your name and phone number, and then will call you back with appropriate information.

If a specialist cannot provide the information you need, but knows who can, you will be referred to that person. If you don't get the information you need from your referral, you can call the specialist back and she will personally walk it through the Survey for you.

If it sounds like the PIO office is well organized, it is, and it has reason to be. Thirty years ago, the first PIO was established, and it hasn't "functionally" changed since then. According to Ernestine Jones, Public Information Specialist, "this has established a continuity of purpose which is useful to customers—they know what kind of services we can provide for them."

There are ten USGS PIOs serving the public nationwide. They answer Earth science inquiries—National or international—and frequently can guide you to the work of other agencies. They provide information on research projects, results of projects, and products of the USGS. They provide topographic, geologic, and water resource maps, reports, and data from the USGS. PIOs provide book reports, nontechnical publications, indexes, catalogs, open-file reports, as well as information on National programs, and cooperative programs with other Federal and State agencies.

If you have a study area, the specialist can recommend books, maps, and data relating to specific subject areas and can tell you whom to contact to obtain technical information and data from scientific offices. Seven of the ten PIO offices have their own reference libraries and archival materials for the public, and the other three provide access to the Survey library.

The PIOs can sell you, over-the-counter, topographic and thematic maps, and book reports for their geographical area. The offices are

located throughout the United States in Anchorage, Alaska; Dallas, Texas; Denver, Colorado; Los Angeles, Menlo Park, and San Francisco, California; Reston, Virginia; Salt Lake City, Utah; Spokane, Washington; and Washington, D.C. The Reston and Washington, D.C., offices carry products for the entire Nation. The Anchorage, Los Angeles, and Spokane offices have Landsat reference files and viewers for satellite imagery.

The PIOs always respond to customer requests. If the customer has made a very broad inquiry, the PIO specialist may write back asking them to try and narrow the request down, but will send the customer some information that should be of help in the meantime. The most difficult requests are usually those relating to very new areas of study for which few publications of any sort exist.

Because the PIO receives such a wide variety of requests, it takes about one full year of on-the-job training for an employee to feel confident with the subject matter. They learn by doing—every time they get a request, they learn something new.

One would be surprised to see the many customers and constant activity of a PIO office in action. The PIO offices in Reston and Menlo Park are conveniently located in the same area as NCIC. Customers can get technical assistance from NCIC on cartographic information; they then can go to the PIO counter and discuss their need, and often purchase the desired product. "It's good to talk about what customers need, and then be able to give it to them."In addition, customers can browse through the office, look at display products, flip through Landsat samples, and browse among the shelves of Survey publications.

Next time you have to contact a PIO office, you will know what they are equipped to do. If you know what they have to offer and you know what you want, things should go a lot smoother. But according to Miss Jones, "nothing is so far out that we won't at least give it a try." —*DCS*

The State Cartographic Information Program—Information Exchange

The National Cartographic Information Center (NCIC) is continually searching out new methods of obtaining and providing public access to cartographic information. With the cooperation of other Federal agencies, NCIC has acquired a strong base of information on domestic mapping. In 1976, NCIC began a cooperative State affiliate program in an effort to gain additional cartographic information from State agencies, local governments, and commercial organizations. It has become evident that centralizing cartographic information guarantees the greatest amount of cartographic data available for the greatest number of people.

The objective of the State affiliate program is to make cartographic information more readily available to people and to improve the efficiency of the cartographic data collection and dissemination process. The program was designed to mutually benefit both NCIC and the State affiliate—NCIC provides access to the information systems in exchange for information about cartographic holdings within the State.

For example, NCIC provides the State affiliate with existing indexes and catalogs covering that State; microfilm and hard-copy records of indexes and catalogs; microfilm copies of USGS topographic maps for the State; formats and instructions for entering cartographic data into NCIC's information systems; and NCIC Newsletters and other publications.

The State affiliate, in turn, provides the space, personnel, and equipment to manage the NCIC affiliate; inventories cartographic data generated by State and local government agencies and commercial firms in the State; arranges for cartographic information about the State to be added to NCIC's information systems; provides information to users; and reports to NCIC on the volume and nature of inquiries received.

The USGS Mapping Center NCICs are responsible for establishing and overseeing State affiliate offices in their geographic area. The Mapping Center NCICs are: Eastern Mapping Center, located in Reston, Va.; Mid-Continent Mapping Center, located in Rolla, Mo.; Rocky Mountain Mapping Center, located in Denver, Colo.; and Western Mapping Center, located in Menlo Park, Calif.

The Mapping Centers collect and edit the newly encoded cartographic information submitted by the States, provide it to NCIC Headquarters for system entry, and assist the affiliates in collecting information from State and regional Federal agencies.

NCIC Headquarters, located in Reston, Va., provide overall direction of the affiliate program, conduct training, provide systems development and support, collect the cartographic information directly from contributors and from the Mapping Center NCICs, and organize and disseminate the information to users and affiliated offices.

Organizations that are selected to function as NCIC State affiliates are well established (usually State government) offices that are recognized as the best source for cartographic information in the State. These organizations should possess a strong background in mapping and remote sensing activities.

When a State or State agency is interested in becoming an affiliate, that agency, in coordination with NCIC, holds a meeting to which all State mapping and/or resource management agencies are invited to attend. After receiving a description of the NCIC program and discussing the respective agencies' missions and resources, the State Government selects the agency it feels is best suited for the role.

Presently, there are 29 NCIC State affiliates. Eastern Mapping Center affiliate coordinator, Fred Klinefelter, commented on the State affiliate at the South Carolina Land Resources Conservation Commission, in Columbia, South Carolina. "The agency is charged with the administration of a series of legislative acts dealing with soil and water conservation, dams and reservoirs, and mining and reclamation directed toward the wise use and conservation of South Carolina's land resources. Because of the agency's involvement in mapping activities, they expressed a need for the program. Currently, the agency is involved in obtaining information on aerial photographs, maps, and charts within the State and are encoding them for NCIC system entry. The South Carolina affiliate handles direct sales of maps and charts, aerial photographs, and Landsat imagery. The agency has used television and publications to publicize their NCIC affiliation. Because the University of South Carolina is close by, a great many of the inquiries are generated from the University; however, one-third to one-half of their inquiries come from the general public. The affiliate receives a considerable number of inquiries from State agencies, county tax assessors, surveyors, and forestry related professions."

Western Mapping Center affiliate coordinator, Moyle Stewart, talked about their Nevada affiliate, located in the Division of Mines and Geology, University of Nevada. Stewart said, "This was an appropriate agency to act as an affiliate because the Division was involved in exploration and geologic studies, and functions both as an information and a research organization. Aside from being located in the Division of Mines and Geology, the State Cartographer, map sales, and State University Library are also located in the vicinity. The agency possesses a wide variety of aerial photographs and maps. The affiliate is interested in using low oblique photographs for locating geologic faults, and they are interested in acquiring aerial photography from other agencies to add to their data base. The Nevada affiliate researches USGS products for their customers."

Cheryl Sund, of the Rocky Mountain Mapping Center NCIC, provided information on their New Mexico affiliate at the University of New Mexico, Technology Applications Center (TAC), in Albuquerque, New Mex. TAC was recommended by the State Mapping Advisory Committee to be an NCIC affiliate. TAC was already engaged in aerial photography coverage research, air photointerpretation, and other remote sensing work. In addition, the Remote Sensing Natural Resources Division of TAC has long been a central information and distribution center for all types of aerial and satellite imagery. According to a TAC publication, "In our role as an NCIC affiliate, we are now able to provide the user community with the most complete and up-to-date information on aerial and satellite photography of New Mexico as well as worldwide." TAC also has a complete reference file of USGS topographic maps for New Mexico and equipment and staff to provide computer searches and image processing.

Mid-Continent Mapping Center NCIC affiliate coordinator is Charlie Croom, who described the Minnesota affiliate. "The Minnesota State affiliate, located in St. Paul, Minn., is operated by the Mapping and Remote Sensing Information Center (MARSIC) of the Land Management Information Center (LMIC). MARSIC has been in operation since 1977 and is involved in developing historic and current records of mapping and remote sensing activities in the State. As the focal point for gathering and disseminating cartographic information for the State, MARSIC was chosen to become the State's NCIC affiliate. They are currently involved in several remote sensing projects."

Although the overall consensus of the regional coordinators about the effectiveness of the program was favorable, improvements are still expected to be achieved. Not surprisingly, lack of funds and personnel seemed to be the major problems. One coordinator pointed out that there is sometimes a lack of communication between the affiliate and Mapping Center. He also expressed the need to be concerned with quality affiliates, rather than the quantity of affiliates. George Madill, network coordinator at NCIC Headquarters, says that "we are interested in establishing affiliates, but we will not go out and sign up an agency just to add another name to our list. We want active affiliates who will provide a service to their States as well as strengthen our network."

Klinefelter believes that the major strength of the program is that it "spreads the information around," and "gets us closer to the users," and also helps to expose users to cartographic products.

Generally, everyone is enthusiastic, and said they would like to see more affiliates established—one in every State and possibly even sub-affiliates perhaps at the county level. Future hopes of the Mapping Center coordinators are that the affiliates will become more involved in the data acquisition program and, thus, acquire more imagery for encoding into the NCIC data bases.

Future plans for the program include more contact and closer support of the affiliate offices. Over the next five years or so, NCIC hopes to bring on-line research and ordering capability to the affiliate offices. New publications and exhibit materials are also intended to help publicize the services provided by these offices. Some limited funding for acquisition of data is also envisioned. —*DCS*

USGS Map Price Increases

Prices for Geological Survey maps were increased an average of 60 percent November 25, 1981, the first general map price increase since July of 1976.

Topographic and other maps which were priced at $1.25 now sell for $2 each. Maps that were selling for $1.50 have been increased to $2.50, and others that were priced at $2 will be $3.25.

Thematic maps have been increased by similar amounts. Because of the variety of sheet sizes, colors, and numbers of sheets for each map, customers should contact the Survey directly for specific product prices until new price lists are issued. Price information may be obtained from either of the two Distribution Centers (Denver, Colo., or Arlington, Va.) or any of the Survey's ten Public Inquiries Offices (see box below).

The Survey has also increased its discount rate for authorized dealers and for quantity purchases from 30 percent to 50 percent. The minimum order qualifying for the 50 percent discount is $500. —*Russ Wylie*

Specific product price information may be obtained from the following:

Distribution Centers

Eastern Distribution Branch
1200 S. Eads St.
Arlington, Va. 22202

Western Distribution Branch
Box 25286 Federal Center
Denver, Colo. 80225

Public Inquiries Offices

108 Skyline Building
508 2nd Ave.
Anchorage, Alaska 99501

Room 1-C-45 Federal Building
1100 Commerce St.
Dallas, Tex. 75242

169 Federal Building
1961 Stout St.
Denver, Colo. 80294

7638 Federal Building
300 North Los Angeles St.
Los Angeles, Calif. 90012

Building 3, Mail Stop 33
345 Middlefield Rd.
Menlo Park, Calif. 94025

Room 1-C-402
503 National Center
Reston, Va. 22092

8105 Federal Building
125 So. State St.
Salt Lake City, Ut. 84138

504 Custom House
555 Battery St.
San Francisco, Calif. 94111

678 U.S. Court House
West 920 Riverside Ave.
Spokane, Wash. 99201

Room 1028, General Services Building
19th and F Sts., N.W.
Washington, D.C. 20244

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New U.S. Geological Survey Maps and Products

Maps Showing Federal Conservation Areas in Alaska

Two new maps are available showing Federal conservation areas in Alaska. The multicolor maps have been published at 1:5,000,000 scale and 1:2,500,000 scale. Shaded relief highlights the dominant terrain features of the State. Included on the maps are the lands of the National Wildlife Refuge System, National Park System, Bureau of Land Management System, National Wild and Scenic River System, and National Forest System. Notable land features of the State are also shown. The boundaries are shown for public information and are not intended as official boundaries. The maps, titled "Alaska National Interest Lands Conservation Act of December 2, 1980, Map (P.L. 96-487)," are available for $3.25 each from Alaska Distribution Section, New Federal Bldg., Box 12, 101 Twelfth Ave., Fairbanks, AK 99701, or the Western Distribution Branch, U.S. Geological Survey, Box 25286, Denver Federal Center, Denver, CO 80225.

Irrigated Cropland Maps of High Plains Areas

Nine maps showing irrigated cropland in the High Plains from 1978 Landsat Earth Resources Survey Satellite images are now available. The maps depict irrigated cropland in 15 counties in 8 States. The region encompasses the area from South Dakota to New Mexico. The maps are part of a 5-year project to develop a ground-water flow computer model of the Ogalalla aquifer and associated water-bearing sediments of the High Plains region. The model will be used to evaluate alternative ground-water management methods in the region. The maps sell for $3.50 each. Maps of counties in Wyoming, Colorado, New Mexico, and Texas are available from Rocky Mountain National Cartographic Information Center, U.S. Geological Survey, Box 25046, Federal Center, Mail Stop 504, Denver, CO, 80225. Maps of counties in South Dakota, Nebraska, Kansas, and Oklahoma are available from Mid-Continent National Cartographic Information Center, U.S. Geological Survey, 1400 Independence Road, Rolla, MO, 65401.

Atlantic Coast Ecological Inventory Maps*

The Fish and Wildlife Service, together with the USGS, has produced 31 Atlantic Coast Ecological Inventory Maps. The 1:250,000-scale maps depict the entire 76,000-square-mile coastal zone, major land use designations, and all important fish and wildlife species and their habitats. The five-color maps make it possible to select any site on the East Coast from Maine to Florida and identify the habitat of the various types of fish and wildlife (such as endangered species, migratory waterfowl, and commercially important fish populations) that use the area and the different land use designations nearby (such as National wildlife refuges, State waterfowl management areas and National and State parks).

The pocket-folded (4- by 8-inch) maps are available for $3.25 each from USGS Eastern Distribution Branch, 1200 South Eads Street, Arlington, VA 22202.

Similar maps are available for the Pacific Coast from the Western Distribution Branch (see address above.)

Now Available through USGS*

Bureau of Land Management (BLM), Land Management Maps and Surface Minerals Maps are now available through the USGS Eastern and Western Distribution Branches for $3.25 each. As part of a work-share program, USGS is providing 1:100,000-scale base maps to BLM who is producing the thematic overlays. An index is also available upon request.

Maps of Colorado Counties*

A new series of topographic maps are available for each of Colorado's 36 counties. The maps, published at 1:50,000 scale, provide statewide coverage compiled from the most recent USGS 1:24,000 and 1:62,500 scale maps and aerial photographs. The maps, compiled in cooperation with the State of Colorado, meet National Map Accuracy Standards. The USGS has similar county mapping programs in Pennsylvania, Connecticut, Virginia, California, and Kansas.

The maps are available for $3.25 per map sheet from the Western Distribution Branch (see Western address above) and selected map dealers in Colorado.

A Guide to Obtaining Information from the USGS 1981

A useful guidebook is available which provides instructions on how to obtain maps, books, reports, general and specific information, and a wide range of products from the Survey. The guide lists the individual products, and provides descriptions of specialized reports and other products. In addition, the addresses, phone numbers, and a brief description of the offices from which the information can be obtained are provided. The guide, titled "A Guide to Obtaining Information from the USGS 1981" published as USGS Circular 777 is free of charge and can be obtained from the U.S. Geological Survey, Text Products Section, Eastern Distribution Branch, 604 South Pickett Street, Alexandria, VA, 22304.

Colonial Virginia National Historical Area Map*

The USGS, in cooperation with the National Park Service, has prepared a topographic map of colonial Virginia. The map shows present day Jamestown, Williamsburg, and Yorktown on one side, and the Yorktown Battlefield as it existed in 1931 on the reverse, complete with troop and revolutionary battle overlay. The colonial Virginia map is produced at 1:25,000 scale and shows major roads, airports, parks, and related features of interest.

The Yorktown Battlefield map, produced at 1:10,000 scale, depicts the Amercian, French, and British troop positions during the Battle of Yorktown. There is also a descriptive text on the history and development of Jamestown and photographs of major points of interest in the area.

The map was prepared for the October bicentennial celebration of the surrender of Lord Cornwallis to General Washington at Yorktown. A French version of the map was produced to commemorate the assistance offered by France during this important event in American history.

"Colonial National Historical Park, Virginia" map number 37076-B5-PF-025 is $3.25 and is available from Eastern Distribution Branch, 1200 South Eads St., Arlington, VA, 22202, and from the National Park Service, Yorktown, VA, 23690, and can be purchased from local map dealers in the park vicinity. —*DCS*

*USGS Map Reference Library depository items

Newsletter No. 12
Winter/Spring 1982

Newsletters Available

The newsletter of the Map and Geography Round Table (MAGERT) titled "base line" is available by subscription.

"base line" contains information on new books, articles of interest to the map library audience, news, new map citations, duplicate maps available, conference reports, and business reports of the Round Table. There are four issues of "base line" per year.

The newsletter is free to members of the American Library Association MAGERT and $12 per year to nonmembers. Nonmembers should address subscription requests to: Charles Seavey, Subscription Manager, "base line," Government Publications and Maps Department, Zimmerman Library, University of New Mexico, Albuquerque, NM, 87131.

ALA members wishing to become MAGERT members should address inquiries to: Map and Geography Round Table, American Library Association, 50 E. Huron St., Chicago, IL, 60611, telephone (312) 944-6780. Personal membership is $7, and institutional membership is $10.

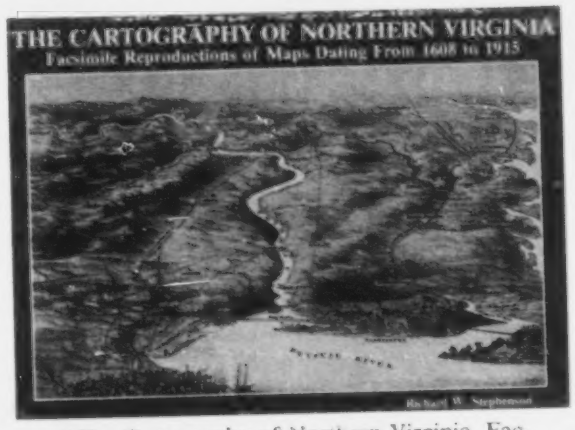
"Illinois Mapnotes" is a newsletter published by the Laboratory for Cartography and Spatial Analysis, Department of Geography, Northern Illinois University. The newsletter is designed to promote communication among producers and users of spatial data concerning statewide needs and priorities.

Information for the newsletter will be obtained from current journals and newsletters of Federal, State, and local government agencies and professional organizations, as well as readers contributions. A unique feature of "Illinois Mapnotes" is the opportunity to join their "network of reporters" who will submit potential news items and feature story ideas monthly. Reader contributions are encouraged.

"Illinois Mapnotes" should be of interest to those dealing with maps, imagery, natural resource inventories, and spatial data handling systems. It is available free from "Illinois Mapnotes," Laboratory for Cartography and Spatial Analysis, Department of Geography, Northern Illinois University, DeKalb, IL 60115.

"Map Gap," the newsletter of the North American Cartographic Information Society (NACIS) is in circulation, and is available to members and potential members of the society. Contributions from readers are encouraged in all areas of cartographic information. "Map Gap" will contain information on bibliographic citations, workshops, conferences, and projects related to cartography. Members should contact Karl Proehl, Pattee Library Map Section, Pennsylvania State University, University Park, PA, 15802, telephone (814) 863-0094. Those interested in joining NACIS should contact Christine Reinhard, Assistant State Cartographer, University of Wisconsin, 143 Science Hall, Madison, WI, 53706, telephone (608) 262-3065. *—DCS*

The Cartography Of Northern Virginia



"The Cartography of Northern Virginia, Facsimile Reproductions of Maps Dating from 1608 to 1915," by Richard W. Stephenson, is a collection of selected "key" maps of the northern Virginia area. The atlas contains 70 maps and two atlases illustrating the history of the region ranging in date from the first map of Virginia compiled by Captain John Smith in 1608, to the 1915 U.S. Geological Survey production of the "Fairfax Quadrangle." Maps produced after 1915 are not included in this atlas.

The atlas includes the most relevant portions of the key maps of Virginia and significant maps of all or part of northern Virginia. Reduction was kept to a minimum to insure legibility of place names and names of residents printed on the maps.

In this atlas, the term "northern Virginia" denotes the area originally included in Fairfax County when it was formed from Prince William County in 1742. Today, this area is divided into counties including Fairfax, Arlington, Loudoun, and the cities of Alexandria, Fairfax, Vienna, Herndon, and Clifton.

The idea to produce this compilation of maps came from an illustrated lecture on the early maps of Fairfax County, Virginia, for local citizens as part of an adult education series titled "Fairfax County, Then and Now," sponsored jointly by the Fairfax County History Commission and the Division of Adult Services of the Fairfax County public schools. The public interest in the maps selected to illustrate the lecture and their desire to obtain reproductions of these maps led to the production of the atlas. The atlas was an inexpensive means of putting together many of the significant historic maps of the region.

The book is available for $12.50 from the Fairfax County Maps and Publications Office, 40100 Chain Bridge Road, Fairfax, VA 22030. *—DCS*

Satellite Hydrology Book Review

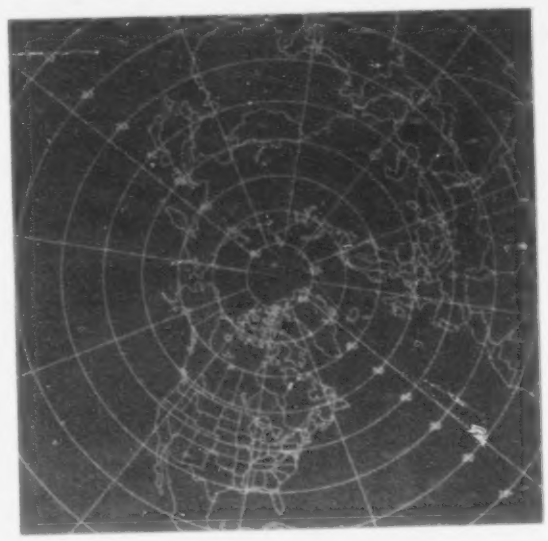
The Proceedings of the Fifth William T. Pecora Memorial Symposium on Remote Sensing have been published in a volume titled "Satellite Hydrology." This valuable reference volume contains more than 100 papers and 700 figures, including 101 in color, contributed by some of the foremost worldwide authorities on hydrology and remote sensing.

The symposium was sponsored by the American Water Resources Association in cooperation with the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautics and Space Administration (NASA), and the U.S. Geological Survey (USGS) in 1979. The symposium provided a forum during which physical scientists and engineers could review the state of the art of applying satellite data to hydrologic problems. The forum examined satellite technology relevant to the hydrological sciences, the data and space-communication requirements anticipated by the water resources community, and the future directions of satellite remote sensing.

"Satellite Hydrology" contains philosophical and technical backgrounds for the application of remote sensing by earth scientists, and interests and activities of participating U.S. and Canadian governments, universities, and the private sector in implementing satellite technology to water related programs. The remainder of the volume is divided into chapters dealing with applications of satellite data related to the hydrologic cycle and man's impact in the areas of meteorology, snow and ice, surface water, soil moisture, ground water, wetlands, coastal zone management, water quality and environmental assessment, and water use and management. The color illustrations are of excellent quality, permitting the reader to study the detail described in the text by the various authors.

The book, edited by Morris Deutsch (USGS), Donald R. Wiesnet (NOAA), and Albert Rango (NASA), will be a useful reference tool for professional hydrologists, civil engineers, remote sensing specialists, and students.

The hard-cover book sells for $85 and is available from American Water Resources Association, St. Anthony Falls Hydraulic Laboratory, Mississippi River at 3rd Avenue, S.E., Minneapolis, MN 55414. *—DCS*



Newsletter No. 12
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Affiliate News

1. Eastern

The Georgia State Affiliate has been transferred from the Georgia Geological Survey, Department of Natural Resources, to the Georgia Department of Commerce Affairs. David Wiltsee, Director, Office of Research and Evaluation, will be the affiliate officer. The transfer is due to a reorganization.

The Alabama, New Jersey, Kentucky, and South Carolina State Affiliates have entered into cooperative agreements with NCIC to locate data for encoding into the NCIC data systems.

2. Western

Western Mapping Center is signing a new State affiliate agreement with the State Library at Oregon State. This will be a quadripartite agreement with three other agencies backing up the State Library.

Paul Tessar is the new director of the Phoenix, Arizona, affiliate. He replaces Mike Castro.

3. Mid-Continent

Mid-Continent Mapping Center has acquired a new State affiliate at the Department of Natural Resources in Lansing, Michigan.

Mid-Continent Mapping Center affiliate coordinator plans to visit all of the affiliates for the purpose of seeing what has been done and what needs to be done to establish an effective program for this year.

4. Rocky Mountain

Rocky Mountain Mapping Center has acquired a new State affiliate contact at the Utah Geologic and Mineral Survey in Salt Lake City, Utah. The new contact is Mage Yonetani.

The New Mexico affiliate has published a "Geologic Time Illustrated" poster available for $3.75 plus $2 postage and handling from TAC, University of New Mexico, Albuquerque, NM 87131. Bulk quantities are also available.

Meetings and Conventions

24th Australian Survey Congress and 5th Australian Cartographic Conference	Canberra, Australia April 19-22, 1982
International Geoscience and Remote Sensing Symposium	Munich, Germany June 1-3, 1982
Environmental Research Institute of Michigan (ERIM), Sixteenth International Symposium on Remote Sensing of Environment	Buenos Aires, Argentina June 2-9, 1982
Special Library Association (Geography and Map Division)	Detroit, Michigan June 2-9, 1982
American Library Association (Map and Geography Roundtable)	Philadelphia, Pennsylvania July 10-14, 1982
Purdue University, Laboratory for Applications of Remote Sensing (LARS), Eighth International Symposium on Machine Processing of Remotely Sensed Data	West Lafayette, Indiana July 7-9, 1982
Australian Institute of Cartographers, International Cartographic Association 7th General Assembly, 12th International Conference of ICA	Perth, Western Australia August 1984

U.S. Department of the Interior

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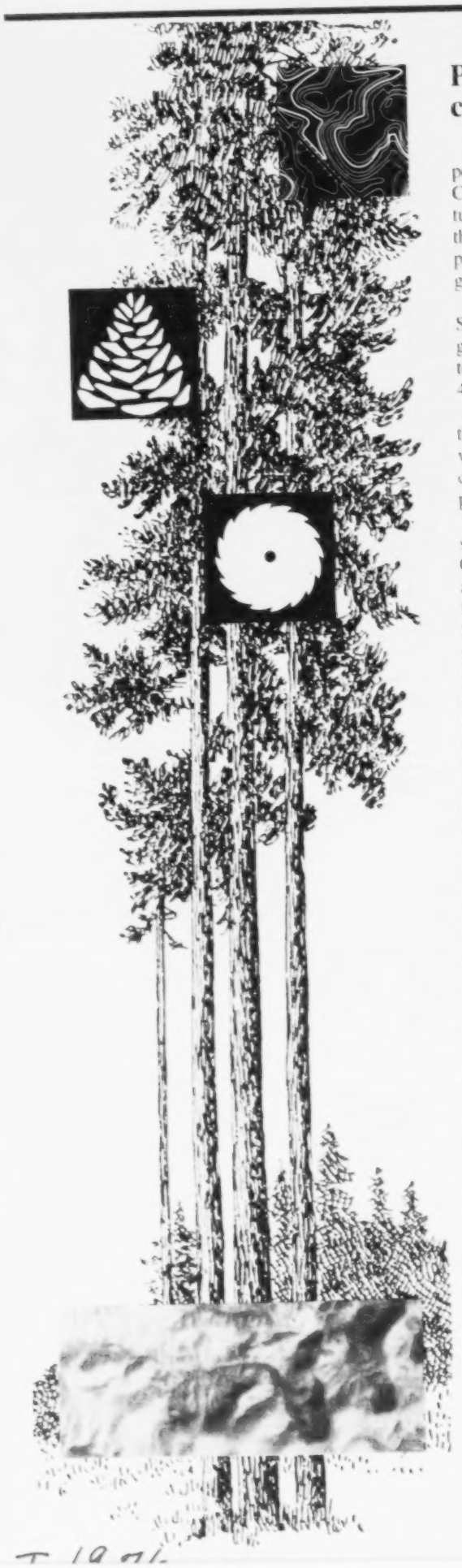
Newsletter No. 13
Winter 1982

National Cartographic
Information Center (NCIC)

Newsletter

U.S. Department of the Interior
Geological Survey
National Mapping Program



Paper and wood products company using NHAP

Kimberly-Clark Corporation, an international paper and wood products company with operations in Coosa Pines, Ala., is making National High-Altitude Photography (NHAP) an important part of their business. They have discovered numerous applications for NHAP and are planning future programs with it.

The company is purchasing the U.S. Geological Survey's color-infrared (CIR) NHAP at a photographic scale of 1:58,000. The 9- × 9-inch photography is taken by a contractor-owned aircraft at 40,000 feet above mean terrain.

Kimberly-Clark is using the photographs for their own mapmaking purposes and for forest inventory surveys, land-use appraisals, harvest allocation schedules, tree stand classification, and fiber productivity assessment.

The goal of Kimberly-Clark is to map all their southern forest areas (600,000 acres in Alabama, Georgia, and South Carolina) at a common scale and to update these maps with the information from NHAP. To do this, they purchase Geological Survey 7.5-minute topographic quadrangle feature separations depicting township and range, and streams and roads, which they compile into a base map. Then they purchase the NHAP color transparencies and enlarge the image with an optical transfer device (Transyscop®) to their desired scale. They project that image onto the map, and draft the needed information from the photograph. The composite data sheet then becomes their forest operations map.

According to Vernon J. Knight, Vice President of Kimberly-Clark, "with NHAP we have been able to re-map and analyze our entire forest in a single year."

Many large forest products companies are not equipped to perform a detailed land inventory within a few months. NHAP makes it possible to expedite the inventory of their lands, and to quantify the acreage of productive timber stands, the area being reforested, and nonproductive land. Before NHAP, it was feasible to appraise only one-fifth of their entire property per year.

With an accurate inventory of their lands, Kimberly-Clark can better develop timber harvesting schedules and forestry work plans. Projections of future wood supply are also facilitated. For example, they have several mills located throughout the southern United States to which the company must provide a reliable supply of wood to insure their continued operation. With NHAP, they can project that five years from now specific tracts of timber will be mature and ready to cut, and this raw material can be allocated in advance to the most appropriate consuming mill. Now, they can more accurately plot distribution points, designating amounts and times when timber would be transported from those areas.

The color-infrared photography is particularly useful to Kimberly-Clark for the purpose of accurately identifying tree types. Kimberly-Clark is interested primarily in pine trees for pulpwood and lumber production, and on the winter CIR photography, pines show up in distinctive shades of red. Fortunately, the majority of the NHAP coverage for their areas in Alabama were flown in the months of January, February, and March.

The CIR is more useful to Kimberly-Clark than black and white photographs because "without CIR, species could not be as sharply discerned, and indications of soil moisture that give clues to relative productivity could not be seen. Also, the CIR resolution is excellent."

With NHAP, Kimberly-Clark can identify "stand condition classes" in their forested areas and, thus, stratify land according to areas with natural, existing pines contrasted to planted pines. They can delineate species groups, tree size categories, and number of trees per acre. They can also stratify pine plantation acreage by age groups, species, and trees per acre. In addition, they can assess plantation losses caused by pine beetles and beavers.

The company has discovered many other uses of the NHAP data. They can manipulate the data to delete non-forest features from their productive acreage, such as swamps, and they can better assess permanent land openings such as rock outcrops, roads, and rights-of-way. They can spot narrow bands of drainage-type hardwoods, and map these areas in upland forests.

As an adjunct of the NHAP project, Kimberly-Clark conducts field appraisals, obtains plot samples, and superimposes information from the area sampled onto their maps. When the data are compiled and analyzed, they are able to accurately estimate the cubic feet of wood per acre.

In the future, Knight hopes to use the photographs for improving the accuracy of statewide survey data on resource availability from open-market lands. They are currently working on a system to appraise the amount of non-captive fiber available in areas tributary to their consuming mills.

Knight says NHAP has been a "lifesaver" in terms of both time and money. His main hope for the NHAP program is that total coverage will be repeated at least every five years and that the high-quality photographs will continue to be available to the public.

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Newsletter No. 13
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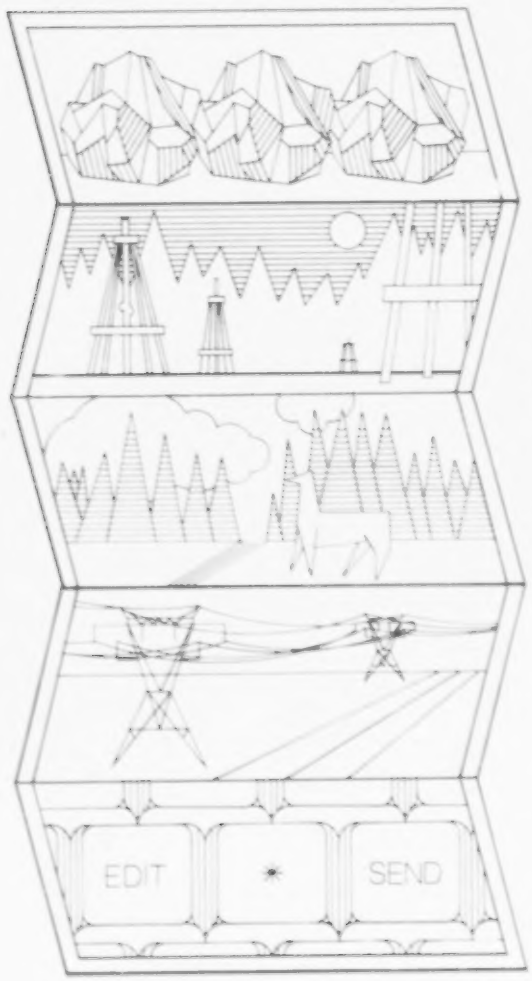
New U.S. Geological Survey maps

Mineral Deposits Map of North America

A 1:5,000,000-scale, 14-color map depicting the geology and ore deposits from Greenland to Panama, including the islands of the Caribbean, entitled "Preliminary Metallogenic Map of North America" has been published. Two companion reports identify the deposits and list mineral commodities and coordinates. The map consists of four map sheets available for $10 per set from Eastern Distribution Branch, U.S. Geological Survey, 1200 South Eads St., Arlington, Va. 22202 or Western Distribution Branch, U.S. Geological Survey, Box 25286, Federal Center, Denver, Colo. 80225. Orders must specify the map by name and include a check or money order payable to the U.S. Geological Survey. Copies of the companion reports, USGS Circular 858-A, "Preliminary Metallogenic Map of North America: A Numerical Listing of Deposits," and USGS Circular 858-B, "An Alphabetical Listing of Deposits," are free upon application to Text Products Section, Eastern Distribution Branch, U.S. Geological Survey, 604 South Pickett St., Alexandria, Va. 22304.



Map Showing Evaluation of Oil and Gas Potential of the Shoshone National Forest, Wyoming

A new map outlining the oil and gas potential of the Shoshone National Forest in northwestern Wyoming was released by the U.S. Geological Survey, in cooperation with the U.S. Forest Service. The map and report may be purchased from the Open-File Services Section, Western Distribution Branch (see Denver address above). Prices are $2.50 for each paper copy and 50 cents for microfiche. Orders must include the report number (OFR 81-667) and check or money order payable to the U.S. Geological Survey.

Maps Showing Federal Conservation Areas in Alaska

A series of 233 maps showing Federal conservation areas in Alaska have been prepared by U.S. Geological Survey in cooperation with Interior's Fish and Wildlife Service, National Park Service, and the Bureau of Land Management. The maps are available in 31 sets, each covering a particular National Wildlife Refuge System area, National Park System area, or other conservation area administered by the Bureau of Land Management. The maps have been published at a scale of 1:250,000 except for two earlier maps published at 1:5,000,000 and 1:2,500,000 scale. The maps are available individually or as sets at a cost of $2 per map from either of the Distribution Branches listed above.

Tennessee Valley Region Map

A revised edition of the Tennessee Valley Authority (TVA) principal base map of the Tennessee Valley region, showing TVA installations, watershed of the Tennessee River system, limits of the Power Service Area, interstate highway system, Federal and State highways, cities and towns, State and county boundaries, lakes and streams, railroads, and National and State parks and forests is now available in two editions: (1) standard base map and (2) base information overprinted with an index to mapping for the region. The map is available for $10 over the counter, or mailed within TVA region with $2 mailing charge, or outside TVA region with $3 mailing charge. The map is also available mounted on masonite for $60, or mounted over the old version of the region map for $38. Framing is available ranging from $60 to $100. Copies of the map and detailed information on mounting and framing are available from Mapping Services Branch, 100 Haney Building, Chattanooga, Tenn. 37401, and from TVA's Map Sales Office, 400 West Summit Hill Drive (WPA3), Knoxville, Tenn. 37902.

First Computer-Generated Map Available

The first computer-generated topographic map completed by the National Mapping Division is available for sale. The five-color Birch Tree, Mo., quadrangle map, produced at the scale of 1:24,000, covers about 60 square miles. Copies of the map may be purchased for $2 each from Western Distribution Branch (see Denver address above). Orders must specify Birch Tree, Mo., digital 1:24,000-scale map and include check or money order made payable to the U.S. Geological Survey. The map may also be purchased from the Missouri Department of Natural Resources, Division of Geology and Land Survey, Post Office Box 250, Fairgrounds Road, Rolla, Mo. 65401.

Mapping exhibits available

The National Mapping Division Traveling Exhibit titled "US Maps: Helping Us Know a Nation Better" which illustrates the variety of mapping done by the U.S. Geological Survey is available for circulation. The exhibit is available for approximately a three-week time period. The space needed to support the display requires an area 5 feet deep by 16 feet long, with a ceiling clearance of 8 feet. Each exhibitor is responsible for shipping charges to the next point where the exhibit is scheduled. If you would like to obtain the exhibit or for further information about the exhibit or its whereabouts, contact: U.S. Geological Survey, Visual Information Services Office (VISO), 790 National Center, Reston, Va. 22092, 703-860-6162, FTS 928-6162.

"Mapping the West," a new and larger NMD exhibit, is also available for loan. The exhibit traces the historical development of mapping from the 1800's, up through such recent mapping developments as the National High-Altitude Photography Program, the Geographic Names Information System, the 1:2,000,000-scale digital line graphs data base, and satellite data. For more details on the exhibit, contact VISO *(see address above)*.

Provisional maps

The National Mapping Division has recently begun releasing provisional editions of its large-scale topographic maps. These maps portray essentially the same level of information as standard topographic maps, but several steps in the map finishing process are being changed to speed up completing the 1:24,000-scale mapping of the Nation.

With the implementation of the provisional map program, the National Mapping Division should be able to complete coverage of the conterminous 48 States and Hawaii with 1:24,000- or 1:25,000-scale maps by approximately 1988. Maps will be produced in 7.5- × 7.5-minute or 7.5- × 15-minute format in either customary or metric units. Alaska will be mapped in 15-minute format at 1:63,360 scale.

Provisional maps are designed to meet National Map Accuracy Standards. The most significant modification in the provisional mapping procedure is the use of photogrammetric manuscripts for reproduction copy. Hand lettering is used to identify many features. Maps of nonpublic land States will be lithographically reproduced in four colors—black, blue, brown, and green. Maps of public land States will be in five colors—the same as for nonpublic land States plus red.

The provisional maps are readily distinguishable from standard topographic maps. For example, the margin type is printed in brown instead of black. In addition, the map collar bears the words "Provisional Edition."

The provisional map program will result in expedited large-scale mapping coverage, at a reduced cost, without giving users less information than they are accustomed to receiving. In the future, the provisional maps will be updated, finished, and distributed as standard topographic maps.

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David Teske: Mapping the stars

Man has long been working from Earth to map the Earth. Recently, man has been working from the sky and even space to better map the Earth. David Teske is doing something different—he is working from the Earth to map the sky.

Teske, 40, is a self-proclaimed mapmaker. He graduated from Decorah's Luther College in Decorah, Iowa, with a degree in speech, but his real interest and lifelong fascination is with the stars. Since 1970, he has been working out of his basement in Manchester, Iowa, to create some of the most accurate and artistic star maps ever.

Teske's maps are useful because they portray the entire sky in a handy, rectangular format. The typical round star maps portray the sky as if you were viewing it from only the North Pole or the South Pole, and you would need to have two maps to see the entire sky—one of the Northern Hemisphere and one of the Southern Hemisphere. Teske's maps portray the entire sky, just as you see it when you look up. On Teske's maps, every star is precisely sized by brightness. He was the first to produce a computer-generated star map, for which "the computer perfectly plots the location of the stars and sizes the star circles to exact magnitude." Further, Teske maps only the stars that are visible to the naked eye, so the map user is not confused with the presence of additional stars that cannot really be seen.

Teske's first map was constructed in the woods north of San Francisco, California. The map was an 8- by 14-foot piece of wood on which he used upholstery tacks to represent the stars. He displayed this unique map at the Renaissance Fair in California.

The map proved to be popular, and Teske began to produce paper maps of the sky. He used to do all of his maps by hand, but he soon realized the capabilities of the computer in mapping and now uses the computer extensively in the production of his maps. To use a computer system, he must fly to the University of California, Berkeley. There, he uses the computer to plot out his stars and to make any technical adjustments necessary. The pattern is then transmitted onto a transparent mylar sheet. Later, he adds particular details by hand.

Each of Teske's maps are designed for a reason—to treat a specific concept. For example, he has recently completed a compact map titled "Handy Heavens." Handy Heavens includes "text and illustrations which explain the sky as it would be seen from many different geographical areas, at different times of the year." The reverse side contains information on the origins of the stars. Another map, titled "Renaissance," provides a map of the sky along with information on Renaissance astronomy and its well-known astronomers.

One of Teske's maps titled "Original Size" was an award winner in the design competition sponsored by the American Congress on Surveying and Mapping (ACSM). The map measures 60- by 30-inches. Like all of Teske's maps, each star is sized to its brightness. This map, however, has a unique feature. With an electric light dimmer, the user can raise and lower the illumination making different magnitudes come into view. All designations are toned down to fade out at a distance allowing an esthetic view of the stars.

Teske's maps are varied. They range in size from postage size to 25- by 12½ feet and cost anywhere from 50 cents to $150. Teske sells his maps wholesale to bookstores, map stores, even the Smithsonian Institution.

Teske is quickly becoming popular for his maps for the blind. In these maps, Teske uses upholstery tacks to represent the stars. Fishing line joins the constellations with a moveable T-square to guide the person through the heavens. The grids and the map explanations are in braille. Teske recently completed two of these maps and donated them to the Iowa Braille and Sight Savings School where he also taught and lectured.

Teske annotates on each map the epoch in which the map was created. Therefore, the maps can be used at any point in time and any change should be understood by the map user.

The maps have a variety of uses. Navigators, astrologers, stargazers, planetariums, and people interested in learning about the sky are buying the maps.

Teske is the most published star mapper in existence. He has "more on file at the Library of Congress than any other mapmaker." Teske knows each of the 8,602 stars by name, their origin, star number, and constellation.

Teske is constantly looking for errors in his maps. As soon as one map is generated, an error "inevitably" jumps out at him and he looks for ways of eliminating them and improving his maps.

Why has Teske independently undertaken such a large and endless task? Because, he says, "I want to preserve the wonder of my childhood sky" on paper. He said that he has recently seen so many manmade satellites among the stars that he wanted to begin mapping the real stars on paper.

But there are other reasons—more philosophical ones. He considers maps of the stars to be extraordinary and different from maps of the land, because unlike mapped land features, you don't have to be anywhere special to see the stars—they can be viewed from any geographical area.

Also, there is an element of history found in the stars, he says. Stargazing is one of the few pleasures that modern man can view exactly as ancient day man did. "We can look up and see the sky, and hundreds of years ago, man stood in the same place and he saw the same sky with the same stars."

Teske's current catalog consists of eight maps: "Stars for the Sightless," "Star Sky," "Get Ready for Haley's Comet in Early 1986," "Original Size," "Renaissance," "Special," "Navigate Like Drake," and "Handy Heavens."

For more information on the availability and prices of Teske's maps, consult your nearest map dealer or bookstore.

National Mapping Division announces US GeoData

All digital cartographic products and byproducts produced by the National Mapping Division will now be labeled "US GeoData." The results of in-depth studies and market surveys indicated that the name US GeoData would be easily recognizable and convey definitive qualities of these digital products to the cartographic user community. In addition, the name US GeoData is compatible with US Maps, the label used to identify all paper maps and map products produced by the National Mapping Division.

The first product released under the name US GeoData is digital line graphs (DLG's) from 1:2,000,000-scale maps. Digital line graphs are line map data in digital form. The data files include data on planimetric base categories such as transportation (roads and trails, railroads, and airports); hydrography (streams and water bodies); and boundaries (political and administrative). Digital data are useful for plotting base maps and for various kinds of spatial analysis.

US GeoData tapes for 1:2,000,000-scale maps are available in two forms: (1) the graphic form used to generate computer-plotted maps and (2) the topologically structured form suitable for use in spatial analysis and geographic studies. US GeoData tapes for 1:2,000,000-scale maps are available for the entire United States, including Alaska and Hawaii, and can be ordered through any NCIC office. For more information and for a free brochure describing the 1:2,000,000 data base, call or write NCIC.

US GeoData

Other digital cartographic products produced by the National Mapping Division and available from NCIC include digital line graphs from 7.5- and 15-minute topographic quadrangle series, 1:250,000- and 1:100,000-scale land use and land cover and associated maps digital data, and digital elevation models (DEM's) for 7.5-minute topographic series. Also available are 1:250,000-scale digital terrain data produced by the Defense Mapping Agency.

National Mapping Division welcomes EROS

The Geological Survey's Office of Earth Sciences Applications (OESA) was officially disbanded on July 29, 1982. As a result, the National Mapping Division (NMD) welcomes the transfer of two units of OESA. Effective August 22, the Earth Resources Observation Systems (EROS) Office was transferred to NMD. The Chief of the EROS program is designated Assistant Division Chief for EROS and will retain line management authority over the EROS office in Reston, the EROS Data Center in Sioux Falls, S. Dak., and the Alaskan field office in Anchorage, Alaska.

The OESA Publications unit was also transferred to NMD, effective August 8, and now reports to the Assistant Division Chief for Information and Data Services.

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Affiliate news

Mid-Continent Mapping Center-NCIC

The Map and Geography Library, University of Illinois, in cooperation with the Illinois Geological Survey, became a new NCIC affiliate on December 15, 1981. The affiliate contacts at the University of Illinois are David Cobb and Valerie Blaine. The contacts at the Illinois Geological Survey are Paul DuMontelle and Edward Scroggin.

Western Mapping Center-NCIC

Western Mapping Center-NCIC has signed on their seventh State affiliate at the Idaho State Library of Boise, Idaho. NCIC-W now has an affiliate in each of the seven States in their region.

Eastern Mapping Center-NCIC

Eastern Mapping Center has acquired two new State affiliates. They are the Maryland Geological Survey and the Delaware Geological Survey.

Rocky Mountain Mapping Center-NCIC

Rocky Mountain Mapping Center State affiliate TAC in New Mexico has recently obtained a collection of manned satellite photographs from a hand-held camera taken by astronauts aboard the Space Shuttle Columbia. TAC is currently organizing and editing the photographs and will produce a catalog listing. TAC now has photographs from all four of Columbia's missions. For more information contact TAC, University of New Mexico, Albuquerque, New Mex. 87131.

Meetings and conventions

American Congress on Surveying and Mapping (ACSM)—American Society of Photogrammetry (ASP)
March 13-18, 1983
Washington, D.C.

Environmental Research Institute of Michigan, Seventeenth International Symposium on Remote Sensing of the Environment
May 9-13, 1983
Ann Arbor, Michigan

Geography and Map Division
Special Library Association
June 1983
New Orleans, Louisiana

9th International Symposium on Machine Processing of Remotely Sensed Data, Emphasis on Resource Evaluation
June 21-23, 1983
Purdue University

Map & Geography Round Table, American Library Association
June 26-July 1, 1983
Los Angeles, California

Fourth International Conference on Permafrost
July 19-22, 1983
Fairbanks, Alaska

Tenth International Conference on the History of Cartography
August 29-September 2, 1983
Dublin, Ireland

International Federation of Library Associations
August 1983
Munich, Germany

Maps on shirts

The Topo T-Shirt Company is producing and selling T-shirts with any one of a wide selection of maps on them. The company is printing navigational T-shirts, and T-shirts with sections of U.S. Geological Survey topographic maps of some of the major recreational areas in the United States and the world.

Some of the areas available include Mt. Everest, Mt. Rainier, Mt. McKinley, Grand Canyon, and Yosemite. Some of the navigational T-shirts include Key West, Cape Cod, Province Town, the Island of Maui, and Santa Monica Bay.

Prices range from $7.95 to $9.95 (plus postage, handling, and sales tax). For more information contact The Topo T-Shirt Company, 232 17th Avenue, San Francisco, Calif. 94121. Phone (415) 751-3958.

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